



January 2021

Social Cognitive Well-Being Model With Native American Students: Exploring Racial Identity And Internalized Racial Oppression

Megan Kay Smith

Follow this and additional works at: <https://commons.und.edu/theses>

Recommended Citation

Smith, Megan Kay, "Social Cognitive Well-Being Model With Native American Students: Exploring Racial Identity And Internalized Racial Oppression" (2021). *Theses and Dissertations*. 4103.
<https://commons.und.edu/theses/4103>

This Dissertation is brought to you for free and open access by the Theses, Dissertations, and Senior Projects at UND Scholarly Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UND Scholarly Commons. For more information, please contact und.common@library.und.edu.

SOCIAL COGNITIVE WELL-BEING MODEL WITH NATIVE AMERICAN
STUDENTS: EXPLORING RACIAL IDENTITY AND INTERNALIZED RACIAL
OPPRESSION

by

Megan Kay Smith
Bachelor of Science, East Tennessee State University, 2012
Master of Arts, Middle Tennessee State University, 2016

A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of


Doctor of Philosophy


Grand Forks, North Dakota

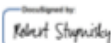
August
2021


Name: Megan K. Smith
Degree: Doctor of Philosophy

This document, submitted in partial fulfillment of the requirements for the degree from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.



Rachel Navarro, Ph.D.


Tamba-Kui Bailey, Ph.D.


Robert Stupnisky, Ph.D.


Jacqueline Gray, Ph.D.

This document is being submitted by the appointed advisory committee as having met all the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.


Chris Nelson
Dean of the School of Graduate Studies
7/21/2021
Date

PERMISSION

Title Social Cognitive Well-Being Model with Native American Students:
Exploring Racial Identity and Internalized Racial Oppression

Department College of Education and Human Development

Degree Doctor of Philosophy

In presenting this dissertation in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my dissertation work or, in her absence, by the Chairperson of the department or the dean of the School of Graduate Studies. It is understood that any copying or publication or other use of this dissertation or part thereof for financial gain shall not be allowed without my writer permission. It is also understood that due recognition shall be given to me and the University of North Dakota in any scholarly use which may be made of any material in my dissertation.

Megan K. Smith
7/12/2021

TABLE OF CONTENTS

LIST OF FIGURES	VI
LIST OF TABLES	VII
ACKNOWLEDGMENTS	VIII
ABSTRACT	IIX
INTRODUCTION	1
SOCIAL COGNITIVE MODEL OF WELL-BEING	2
ENVIRONMENTAL SUPPORTS AND RESOURCES: RACIAL IDENTITY	5
ENVIRONMENTAL BARRIERS: INTERNALIZED RACIAL OPPRESSION.....	6
POSITIVE AFFECT	8
SELF-EFFICACY	8
GOAL PROGRESS	10
DOMAIN SPECIFIC SATISFACTION AND LIFE SATISFACTION.....	11
SUMMARY	12
PURPOSE OF STUDY AND HYPOTHESIS.....	12
METHOD	14
PARTICIPANTS	14
MEASURES.....	15
Satisfaction with life.....	15

Domain specific self-efficacy	15
Domain Goal Progress.....	16
Domain specific satisfaction.....	17
Internalized Racial Oppression.....	17
Positive Affect and Negative Affect Schedule -Positive Affect (PANAS-PA)	18
Racial Identity	19
PROCEDURES	20
RESULTS.....	20
PRELIMINARY ANALYSIS	20
PRIMARY ANALYSIS	21
Academic SCWB model testing.....	22
Social SCWB model testing	22
DISCUSSION.....	23
LIMITATIONS & FUTURE RESEARCH	32
IMPLICATIONS.....	33
REFERENCES.....	35

LIST OF FIGURES

FIGURE 1. The Unidirectional Academic and Social Model of Social Cognitive Well-Being for Native American College Students	44
FIGURE 2. The Unidirectional Social Cognitive Well-Being by Academic and Social Domains for Native American College Students	45

LIST OF TABLES

TABLE 1. Means, Standard Deviations, Internal Consistency Estimates, and Correlations Among Variables of Interest.....	46
TABLE 2. Summary of Fit Statistics for both Academic and Social Models of Social Cognitive Well-Being.....	47

ACKNOWLEDGMENTS

First, I would like to thank my parents for supporting me during this journey. I would not have been able to accomplish this without your unwavering love and encouragement. Second, I would like to thank all of my family, friends, and tribe for the support I have received throughout the years. Third, I would like to acknowledge my ancestors for guiding me on this journey. Without them leading me, I would not have been able to fulfil my purpose in life. Fourth, I would like to say a special thank you to my advisor, Dr. Navarro. Thank you for supporting me in my research interests and in my personal growth as a Native scholar. Finally, I would like to express my appreciation to the members of my dissertation committee and to all the faculty and staff of the University of North Dakota counseling psychology program.

ABSTRACT

In this study, Lent's (2004) social cognitive model of well-being (SCWB) was employed to examine the academic and social domain of satisfaction and life satisfaction with 121 Native American college students. They completed measures of positive affect, Native American identity, internalized racial oppression, and life satisfaction along with domain-specific (i.e., academic and social) self-efficacy, goal progress, and satisfaction. Using path analytic techniques, results indicated that the academic SCWB model was a close fit to data and the social SCWB model was a good fit to data. For both models, the relations among constructs accounted for large portions of variance for domain satisfaction and life satisfaction. Whereas there are some similarities in significant (i.e., self-efficacy to goal progress) and non-significantly (i.e., Native American identity to goal progress) paths across both models, there are some clear path differences. Specifically, the path from domain-specific goal progress to domain-specific satisfaction is significant in the social model but not the academic model. Conversely, the path from domain-specific satisfaction to life satisfaction was significant in the academic model, but not the social model. Implications for future research and practice with Native American college students are discussed.

INTRODUCTION

Native American students represented only 0.6% of college graduates in 2018 (Miller, 2019). Further, they have the lowest 5-year college graduation rate (39.3%) when compared to all other races and those who identified with two or more races (Miller, 2019). These statistics are daunting and point to the importance of supporting these students in their educational journeys. Historically, however, the unique academic experiences of Native American college students have been overlooked within the scholarly literature (Willmott et al., 2015). The lack of research about Native American students' experiences further perpetuates their invisibility (Lopez, 2018). Therefore, it is important that research continues to exist that highlights Native American experiences overall and within higher education specifically.

The research that does exist about Native American college students' experiences predominately focus on persistence and retention suggesting that familial and institutional support, tribal support, and academic performance are essential in college completion (Lopez, 2018). Although persistence and retention research has been instrumental in the retainment of Native American students, there is limited knowledge about their overall well-being and satisfaction. This paucity of research impedes the training and competency of professionals working at institutions of higher education (Willmott et al., 2015), thus resulting in a lack of services and programs focused on enhancing Native American students' college well-being and satisfaction. Therefore, in the current study,

we seek to address this gap in the literature by partially testing a theory that has been shown to explain the well-being and academic satisfaction of other racially marginalized college students (e.g., Ojeda et al., 2010), namely Lent's (2004) Social Cognitive Model of Well-being (SCWB).

Social Cognitive Model of Well-Being

The Social Cognitive Model of Well-Being (SCWB; Lent, 2004) is a social cognitive model that falls under the umbrella of the Social Cognitive Career Theory (SCCT; Lent & Brown, 2006; Lent et al., 1994). The SCCT framework considers personal, contextual, and experiential factors in academic and career development (Lent et al., 1994). SCCT has four interconnected models consisting of interest development, performance, choice-making, and satisfaction (Lent & Brown, 2006). The key variables in the SCWB model include self-efficacy, outcome expectations, goal progress, domain satisfaction life satisfaction, environmental supports and resources, personality traits, and affective dispositions (Lent et al., 2005). Specifically, the SCWB model suggests that (a) personality traits (e.g., extroversion) and affective temperament (e.g., positive feelings) are related to resources and supports in the environment, self-efficacy, and domain specific and overall life satisfaction; (b) environmental supports and resources are related to self-efficacy beliefs, outcome expectations and progress toward goals; (c) self-efficacy beliefs are linked to outcome expectations, progress toward goals, and domain specific satisfaction; (d) outcome expectations are presumed to influence goal progress and domain specific satisfaction; (e) goal progress is linked to domain and overall life

satisfaction; and (f) domain specific satisfaction and overall life satisfaction are linked to each other.

The SCWB model was chosen for this study for four reasons. First, this model has shown its utility across multiple ethnicities (e.g., Hui et al., 2013; Ojeda et al., 2011), nationalities (e.g., Lent et al., 2018; Lent et al., 2014), and geographical locations (e.g., Lent et al., 2017; Lent et al., 2014) with college students. Therefore, it is plausible that the model also will be applicable to the experiences of Native American college students. Second, not only has this model demonstrated its utility across multiple diverse samples, it also has exhibited its versatility with different identity-related environmental supports and barriers (Ezeofor & Lent, 2014; Hui, Lent, & Miller, 2013; Ojeda, Flores, & Navarro, 2011). The current literature on Native American college students illustrates the irrefutable role that racial identity has on their experiences in higher education (e.g., Chee, Shorty, & Kurpius, 2018; Watson, 2011) so having a model that allows for racial identity as well as demonstrate the direct and indirect effects of racial identity is essential. Third, this model was chosen because of its focus on well-being versus persistence intentions. In a literature review about the barriers and strategies for success in Native American college students, Keith and colleagues (2016) identified many factors that impeded or bolstered these students' academic persistence, both socially and academically; however, the discussion of actual well-being was missing. This is a common trend seen in literature around Native American college students; therefore, a model that specifically addresses well-being is needed. Finally, many studies examining

the experiences of Native American students usually solely focus on their academic experiences (e.g., Chee, Shorty, & Kurpius, 2018; Guillory, 2009; Huffman, 2003). This model provides the opportunity to not only explore the academic factors but also the social factors that are mediating the relationship between environmental supports and barriers and domain satisfaction as well as life satisfaction. It is important to examine both domains due to the cultural discontinuity that occurs for Native American students in the classroom as well as in social interactions and how this impacts their overall life satisfaction.

Like Ojeda and colleagues (2010), we extend SCWB by examining socio-cultural factors, such as racial identity and internalized racial oppression, that can act as environmental supports, resources, and barriers and may have indirect and direct relations to academic satisfaction, which in turn is related to life satisfaction. However, we also extend the work of Ojeda and colleagues (2010) by exploring both the social and academic domains within SCWB rather than a singular focus on academic. This is important because we examine if and how Native American college students' confidence in their abilities to successfully navigate the social environment on campus and complete academic requirements (i.e., college self-efficacy) along with their progress toward academic and social goals in college (i.e., goal progress) mediates the relations from environment supports and barriers (i.e., racial identity and internalized racial oppression) to their satisfaction with both their college experiences and their overall life satisfaction. Additionally, we examine both the direct and indirect relations of positive affect to

college and life satisfaction in the lives of Native American college students via relations with environmental factors and self-efficacy (see Figure 1). The extension of this model to the experiences of Native American students significantly adds to the literature of well-being among this unique group. Further, by adding racial identity as an environmental support and internalized racial oppression as an environmental barrier, this study could lead to an innovative avenue in how we discuss the relations of environmental supports and barriers to Native American students' experiences at institutions of higher education that ultimately impact their wellbeing.

Environmental Supports and Resources: Racial Identity

Similar to Ojeda and colleagues' study (2010), it is important to incorporate environmental supports and resources within the SCWB model that are culturally relevant. For Native Americans, it is important to take into account their connection to their culture, or their Native American identity (Cajete, 1999). Native American identification can vary greatly across tribal affiliations, and consequently Native American Students from different tribal communities may have varied experiences in higher education. Even though it is hard to generalize across Native American tribes, some commonalities can be found within cultural values and behaviors (Guardia & Evans, 2008). For example, some core values of Native American communities involve collectivism, respecting differences among individuals, nonverbal communication, patience, living in the present, and viewing life in a holistic manner (Cajete, 1999). Although there are variances across tribes and individuals belonging to these

communities, research has shown that Native American college students still have similar experiences and often these experiences are influenced by factors of racial identification (e.g., Watson, 2011). Previous research indicates that Native American students who have a strong identification with their own Native American identity and have the ability to function in the mainstream environment have endorsed a stronger commitment toward academic goal completion (Okagaki, Helling, and Bingham; 2009), reported greater levels of academic and social adjustment (Watson, 2009), experienced less academic stress (Chee, Shorty, & Robinson Kurpius, 2018), and have greater confidence in their academic abilities (i.e., self-efficacy; Schiefer and Krahe, 2013). Socially, some qualitative studies have found for Native American students, the inability to relate to their peers due to different cultural surroundings prior to college enrollment was a critical factor in their continued feelings of isolation (Huffman, 2001; Jackson, Smith, & Hill, 2003). Because culture and identification with their Native identity is important to many of these college students, racial identity has played a pivotal role in their experiences during their educational endeavors.

Environmental Barriers: Internalized Racial Oppression

Internalized racial oppression influences how individuals think about themselves and others and therefore, can have profound consequences on mental health and behavioral health (David, 2014). Because of the possible detrimental consequences, internalized racial oppression should be examined in the lived experiences of Native American college students, particularly when focusing on well-being. Internalized racial

oppression for Native Americans has been defined as existing in self-negative thoughts, disconnect from ancestral family, spirituality, the self, family, community, and the environment (Poupart, 2003). It is the belief system nested in the negative stereotypes that Native American people have been told about themselves since childhood (e.g., they are lazy, they are uneducated, they are dependent on the government, they are drunks, etc.) (Poupart, 2003). Research specifically studying internalized racial oppression among Native American college students is non-existent; however, some inferences can be made. For example, the participants in Ness' (2002) study, reported that growing up they received covert and overt messages from family and other individuals that being Native was not advantageous. This resulted in participants denying their cultural heritage or left them confused by the conflicting nature of the western and Native American worlds. This affected the participant's educational success at the tribal college where the study took place. Ness (2002) concluded that regardless of the students' level of assimilation, the more the students knew about their heritage the more comfortable they were with themselves (i.e., resolution of internalized racial oppression). Conversely, the less the students knew about their heritage, the more they described lower self-esteem and themes of internalized racial oppression. This suggests how detrimental internalized racial oppression could be for Native American college students and their well-being while obtaining their degree.

Positive Affect

Lent (2004) posited that positive affect would be related to domain specific satisfaction and overall life satisfaction. Watson, Clark, and Tellegen (1988) defined positive affect as a person's feelings of enthusiasm, activeness, and alertness. The positive affective disposition variable was utilized in the current study due to its demonstrated relation to environmental supports and resources, college self-efficacy, academic satisfaction, and life satisfaction (Lent et al., 2014; Lent et al., 2017; Lent et al., 2018) as well as enculturation and acculturation (Ojeda et al., 2010) in diverse populations. Specifically, significant relationships between positive affect and enculturation, positive affect and life satisfaction are found in college students who identified as Spanish (Lent et al., 2017), Mexican American (Ojeda et al., 2010), African (Lent et al., 2014) and Portuguese and Brazilian (Lent et al., 2018). For the social satisfaction model, Lent et al. (2005) also found positive affect to be positively related to self-efficacy, social satisfaction and life satisfaction. The little research that is available for Native American individuals have found that ethnic identity is positively associated with positive affect in high school students (Kenyon & Carter, 2011). It is hypothesized that similar trends will be found within a Native American sample as previous research has shown.

Self-Efficacy

Self-efficacy is described as an individuals' belief that they are capable of effectively dealing with challenges and problems as a result of their own actions

(Bandura, 1997). A positive relationship between self-efficacy and academic satisfaction (domain specific) have been found with college students who identify as Spanish (Lent et al., 2017), Mexican American (Ojeda et al., 2011), African students in the U.S. (Ezeofor & Lent, 2014), and Portuguese and Brazilian (Lent et al., 2018). Conversely, self-efficacy was not found to be a predictor of academic satisfaction for Asian American college students (Hui et al., 2013), or African students in Angola and Mozambique (Lent et al., 2014). Further, self-efficacy was not predictive of social satisfaction for Asian American college students (Hui et al., 2013) and predominantly White students (Lent et al., 2005).

Although no studies have examined the specific relationship between self-efficacy and domain specific satisfaction in Native American students, some researchers have identified the overall positive effect that self-efficacy has on their academic experiences. A qualitative study suggested that the confidence Native American students possess in their abilities to succeed were positively related to academic success, resiliency, and persistence (Jackson, Smith & Hill, 2003). Further, Chee, Shorty, and Robinson Kurpius (2018) found that when Native American students indicate a higher perception of task self-efficacy, they reported lower levels of academic stress. These studies highlight the importance of self-efficacy to the success of Native American students and therefore, more studies need to be conducted exploring this concept. Self-efficacy as it relates to the social domain have yet to be studied in a sample of Native American students, however, given the overall value of collectivism in many tribal communities, it is hypothesized that

their belief in their ability to connect with others, will significantly contribute to their social satisfaction and overall well-being.

Goal Progress

Ryan and Deci (2001) posited that feelings of competence or efficacy toward goals are associated with positive affect and well-being. Lent et al. (2005) found that individual's feelings of goal progress were strongly predictive of domain specific satisfaction and self-efficacy predicted domain satisfaction through its relationship to goal progress which in turn proved a useful predictor of overall life satisfaction. Previous studies have found that perceived goal progress was predictive of high levels of academic satisfaction for African college students from Angola and Mozambique (Lent et al., 2014), Spanish college students (Lent et al., 2017), Asian American college students (Hui et al., 2013), African college students at US universities (Ezeofor & Lent, 2014), and Mexican American college students (Ojeda et al., 2010). Goal progress has also been found to predict social satisfaction as well (Hui, Lent, & Miller, 2013). Ojeda et al. (2010) also found that goal progress predicted overall life satisfaction for Mexican American college students.

Lent et al. (2005) posited that goal progress would be a stronger predictor for domain specific and life satisfaction depending on the importance of the goal to an individual. This is mirrored in qualitative research conducted with Native American students. For example, Flynn and colleagues (2012) found that the emotional and psychological factors of pride in achievement, desire to complete school, and

expectations of family and community were influential motivators in their progression toward their goals. Specifically, one participant described the pride she had in accomplishing milestones because she represented not only herself, but her tribe, her community, and her family. This led her to develop more effective strategies for success and satisfaction in the classroom. This suggests that contextual factors affect the commitment and appraisal of goal progression for Native American students. For this study, it is hypothesized that the Native American students that rate their goal progression higher (i.e., progressing toward giving back to their community) will have higher levels of domain satisfaction and life satisfaction.

Domain Specific Satisfaction and Life Satisfaction

Lent et al. (2005) found that satisfaction in specific domains (i.e., academic and social satisfaction) were able to explain unique variance in overall life satisfaction in a sample of predominantly White college students. Similar results for the academic model only were found cross-culturally for college students who identified as Mexican American (Ojeda, Flores, & Navarro, 2010), African (Lent et al., 2014), Portuguese and Brazilian (Lent et al., 2018), and Spanish (Lent et al., 2017). There is no literature addressing the overall life satisfaction of Native American college students and its relationship to domain specific satisfaction. In this study, it is hypothesized that Native American students that rate their satisfaction in academic and social domains will lead to higher ratings in overall life satisfaction.

Summary

Because of the complexity of Native American students' experiences in higher education, there is a need for a more comprehensive model to understand the relationship between environmental supports and barriers (racial identification and internalized racial oppression) and academic and social satisfaction and overall satisfaction. To the researcher's knowledge, no other study has utilized this model with Native American students to gain a larger picture of their well-being. This is congruent with Native American culture where wholeness is essential in understanding the world and experiences. Further, because the current research has shown that social variables (e.g., family, community, e.g., Thompson, Johnson-Jennings, & Nitzarim, 2013) and academic variables (e.g., academic adjustment; e.g., Watson, 2009) are highly influential in Native American students' experiences, the current study will explore both domains across all mediating variables. This extends the SCWB model even further and looks at these experiences holistically and simultaneously.

Purpose of Study and Hypothesis

In the present study, we aim to partially test Lent's (2004) social cognitive model of well-being with a sample of Native American college students. In response to the call by Lent et al. (2018), the current study seeks to test this framework with a culturally diverse sample. Further, this study seeks to add to the literature on Native American college students' well-being at institutions of higher education. Lastly, in a meta-analytic path analysis on the SCWB model, Sheu et al. (2020), it was observed that this model has

been utilized in the context of academic and work life and less so in other domains like social or health well-being therefore, this study expands the research in the social domain with a culturally diverse sample. The following variables will be included to test the model: positive affect, racial identity, internalized racial oppression, college self-efficacy, academic and social satisfaction, and overall life satisfaction.

This study hypothesizes the following:

H1: Positive Native American identity ratings would have a significant negative relationship

with internalized racial oppression.

H2: Positive affect would predict lower ratings of internalized oppression.

H3: Positive affect would predict higher ratings of Native American identity.

H4: Higher ratings of positive affect, Native American identity, and lower ratings of internalized racial oppression would predict higher self-efficacy (academic and social).

H5: Lower ratings of internalized racial oppression, and higher ratings of Native American identity and self-efficacy would predict higher ratings of goal progress (academic and social).

H6: Higher ratings of positive affect, Native American identity, self-efficacy and goal progress and lower ratings of internalized racial oppression would predict higher ratings of domain satisfaction (academic and social).

H7: Higher ratings of positive affect, Native American identity, and domain satisfaction (academic and social) and lower ratings of internalized racial oppression would predict higher ratings of life satisfaction.

Given the underrepresentation of Native American students in higher education and potential lower levels of college satisfaction and life satisfaction, this study will contribute to the literature by focusing on racial identity factors that could be influencing the experiences of Native American students' well-being.

METHOD

Participants

The sample included 121 Native American college students enrolled in higher education institutions. Participants were over the age of 18. The sample consisted of self-identified females ($n = 63$, 52.1%), males ($n = 56$, 46.3%), non-conforming ($n = 1$, .8%), and non-binary ($n = 1$, .8%). Participants included 13.2% ($n = 16$) 2-year college students, 56.2% ($n = 68$) 4-year university students, and 29.8% ($n = 36$) graduate students. Regarding enrollment status, 90.1% ($n = 109$) were full-time students and 8.3% ($n = 10$) were part-time students. Most participants identified as first-generation students ($n = 72$, 59.5%). Participants included 27.3% ($n = 33$) students growing up on or near a reservation, 15.7% ($n = 19$) small town far from reservation, 28.9% ($n = 35$) in a city, 26.4% ($n = 32$) territory or area with a large population of Native Americans, and 1.7% ($n = 2$) as some combination of previous locations or on military bases. Lastly, the

majority of participants included Native American students that lived with or near their family or community while attending college ($n = 91$, 75.2%)

Measures

Table 1 shows the means, standard deviations, internal consistency estimates, and correlations for each scale in the present study.

Satisfaction with life. The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) measures the overall life satisfaction of a person. The SWLS consists of 5 questions where participants respond on a 7-point rating scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). For example, an item participants responded to was “In most ways my life is close to my ideal”. These responses were averaged to get an overall score of life satisfaction and higher scores indicated higher life satisfaction. Convergent validity was evidenced by positive correlations with other measures of wellbeing (Diener et al., 1985). Ojeda et al. (2011) reported an alpha coefficient of .88 for this measure. The coefficient α value for the present study was .81.

Domain specific self-efficacy. Academic self-efficacy was assessed on two domains: self-efficacy for accomplishing academic milestones and academic coping (Lent et al., 2005). The 12-item scale assesses students’ ability to perform well (e.g., “excel in your intended major over the next semester”) and their ability to cope with barriers in academic success (e.g., “find ways to study effectively for your courses despite having competing demands for your time”). Social self-efficacy was measured

using a 12-item scale assessing students' confidence in effectively interacting in social situations (e.g., "start up a conversation with a stranger"). Each of the scales employ a 10-point rating system, ranging from *no confidence* (0) to *complete confidence* (9). For each scale, total scores were computed by summing responses and dividing by the number of items for each scale. Higher scores indicating higher self-efficacy. Hui, Lent, and Miller (2013) reported alpha coefficients of .89 (academic self-efficacy) and .92 (social self-efficacy). In terms of validity, Lent et al. (2005) reported that each domain yielded theory-consistent relations to domain-relevant predictors and criterion variables. The coefficient α value for the present study was .92 for academic self-efficacy and .90 for social self-efficacy.

Domain Goal Progress. Academic goal progress was assessed using a 7-item measure where students indicate how much progress they perceive they are making toward academic goals (e.g., "completing all course assignments effectively"). Social goal progress also uses a 7-item measure assessing students' perceptions of progress toward social goals (e.g., "finding other people who can support you in difficult times"). Both measures employ a 5-point scale ranging from 1 (*no progress at all*) to 5 (*excellent progress*). For each scale, total scores were computed by summing item responses and dividing by the number of items for each scale. Higher scores indicating higher goal progress. This measure has shown good reliability ($\alpha = .80$, Lent et al., 2005). In terms of validity, Lent et al. (2005) reported that each domain yielded theory-consistent

relations to domain-relevant predictors and criterion variables. The coefficient α value for the present study was .88 for academic goal progress and .80 for social goal progress.

Domain specific satisfaction. Academic and social satisfaction were assessed by a measure created by Lent et al. (2005). Academic satisfaction measures the degree to which a student has felt satisfied by their academic experiences (e.g., “I enjoy the level of intellectual stimulation in my courses”). Responses were rated on a scale from 1 to 5 (1 = *not at all or never*, to 5 = *frequently or all the time*). Social satisfaction was rated on a 6-item measure which asked how often students had positive social experiences over the past week (e.g., “enjoyed talking with or being with friends or relatives.”). These statements were also rated from 1 to 5 (1 = *not at all or never*, to 5 = *frequently or all the time*). For each scale, total scores were computed by summing item responses and dividing by the number of items for each scale. Higher scores indicating higher domain satisfaction. Hui, Lent, and Miller (2013) reported an alpha coefficient of .90 (academic satisfaction) and .87 (social satisfaction). Both academic satisfaction (correlations ranging from .20 to .66) and social satisfaction (correlations ranging from .34 to .69) correlated moderately to strongly with academic and social adjustment scales. This supports the criterion validity of the two domains (Lent et al., 2005). The coefficient α values for the present were .84 (academic satisfaction) and .70 (social satisfaction).

Internalized Racial Oppression. Internalized racial oppression was measured with the Appropriated Racial Oppression Scale (AROS; Rangel, 2014). David et al. (2019) argues that the conceptualization of appropriated racial oppression is not that

different than how internalized racial oppression is already being conceptualized. Therefore, although the terminology is different, the underlying conceptualization is still in alignment with internalized racial oppression and the use of this scale still serves the purpose of this study (see David et al., 2019 for further discussion). The scale was developed to measure the areas of appropriated racial oppression. This scale consists of 24 items and measures the beliefs, attitudes, and emotional reactions of appropriated racial oppression in marginalized individuals. This measure consists of four subscales: emotional reactions (e.g., “There have been times when I have been embarrassed to be a member of my race”), American standard of beauty (“I find persons with lighter skin-tones to be more attractive”), devaluation of own group (“Because of my race, I feel useless at times”), and patterns of thinking (“People of my race shouldn’t be so sensitive about race/racial matters”). Students will rate each item on a 7-point Liker-type scale (*1 = Strongly Disagree* to *7 = Strongly Agree*). Each subscale is scored and then are summed to create an overall total score. Internal Cronbach’s alpha for each subscale were above .80 with the exception of .70 for the appropriation of negative stereotypes subscale. The overall total scale score had a Cronbach alpha of .90. (Rangel, 2014). The coefficient α value for the overall score in the current study was .97.

Positive Affect and Negative Affect Schedule -Positive Affect (PANAS-PA).

Positive affect is measured using the Positive Affect subscale from the Positive Affect and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988). This subscale consists of 10-items that participants respond to using a 5-point rating scale ranging from 1 (*very*

slightly or not at all) to 5 (*extremely*). Items are then averaged; higher scores indicate high levels of positive affect. Ojeda et al. (2010) reported an alpha coefficient of .87 for this subscale. Construct validity were evidenced by negative correlations with distress and psychopathology (Watson et al., 1988). The coefficient α value for the current study was .87.

Racial Identity. Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997) is a 56-item scale that assesses three constructs of racial identity (i.e., centrality, regard, and ideology) and items are rated using a 7-point scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). For each scale, total scores are computed by summing responses and dividing by the number of items for each scale. It should be noted that items one, four, and eight are reversed coded. Higher scores indicate stronger endorsements of the constructs associated with each subscale respectively. The current study is using the centrality scale only. The centrality scale consists of 8-items and assesses the extent that one identifies or defines themselves with regards to race. For the current study, the racial identity of *Black* was replaced with *Native American* for each question (e.g., “Overall, being Native American has very little to do with how I feel about myself.”). Sellers et al. (1997) reported that centrality yielded acceptable reliability ($\alpha = .77$) and construct validity for the full sample. The coefficient α value for the current study was .83.

Procedures

Before research began, approval from the Institutional Review Board for the University of North Dakota was retained. Researchers employed professional, organizational, and social group listservs and social media (e.g., Facebook) to recruit college students who identified as Native American. The snowballing technique occurred during the recruitment of participants given the underrepresentation of Native American college students. Participants followed the link provided in the email flyer or the social media post that sent them to an online survey on Qualtrics. Participants completed measures related to life satisfaction, self-efficacy, goal progress, internalized oppression, positive affect, and racial identity via an online survey. Participants were recruited using social media posts (e.g., Facebook) and e-mails were sent to listservs and professionals who had access to possible eligible students. Participants were given the option to enter their information in a separate survey to be entered into a drawing from one of twenty \$20.00 Amazon gift cards.

RESULTS**Preliminary Analysis**

Prior to preliminary analysis, data were screened and those who were not 18 years of age or older, prematurely quit survey without answering any questions, and/or did not identify as Native American. This resulted in 25 participants being deleted. Therefore, out of the full sample of 146 participants, 121 were included in the analysis. Using SPSS 27, data screening was conducted and found 290 missing values out of 10,842 total

values across 121 cases resulting in 2.67% missingness. Little's missing completely at random test demonstrated that data were missing completely at random [$\chi^2(4) = 3.041, p = .551$]. After examination of skewness and kurtosis, it was determined that the data met statistical assumptions related to normality.

Primary Analysis

Using path analytic techniques via MPlus (Version 8.X; Muthén and Muthén, 1998 – 2012), we tested two hypothesized SCWB models, one within the academic domain and the other within the social domain (see Figure 1). Given the presence of normally distributed data with limited missingness, maximum likelihood (ML) and full information maximum likelihood (FIML) estimators were used to calculate unbiased path coefficients for both models. To evaluate the model fit, we used the chi-square (χ^2), comparative fit index (CFI), the standardized root-mean-square residual (SRMR), and the root-mean-square error of approximation (RMSEA). A significant χ^2 typically implies a poor model fit; however, due to its sensitivity to sample size, additional fit indices were used to assess model fit as follows: $CFI \geq .90$, $SRMR \leq .10$, and $RMSEA \leq .08$ (Kline, 2011). An excellent or close model-to-data fit is indicated when $CFI \geq .95$, $SRMR \leq .08$, and $RMSEA \leq .06$ (Kline, 2011). RMSEA, however, is not the best fit indices to use when there is a limited degrees of freedom (Kenny, Kaniskan, & McCoach, 2015). Thus, CFI and SRMR indices were given more consideration than RMSEA for both the academic and social models of SCWB. Table 2 shows the summary of fit statistics for both academic and social models of SCWB.

Academic SCWB model testing. The relations in the hypothesized academic SCWB model (see Figure 1) were tested with the full sample. Upon review of the CFI and SRMR indices, the hypothesized academic SCWB model was a close fit to the data. As expected, the RMSEA values were high, given that the model only had two degrees of freedom therefore, CFI and SRMR were given more weight in the analysis. Ten paths were significant and illustrated relations in the expected directions, except Native American identity was negatively related to life satisfaction (Path 16). The following nine paths were not significant: (a) positive affect on internalized racial oppression (Path 1), (b) positive affect on Native American identity (path 2), (c) Native American identity on academic self-efficacy (path 5), (d) Native American identity and internalized racial oppression on academic goal progress (path 6, 7), (e) internalized racial oppression, Native American identity and academic goal progress on academic satisfaction (path 10, 11, 13), and (f) internalized racial oppression on life satisfaction (path 16). The relations within the model explained a significant amount of variance in internalized racial oppression (.6%), Native American identity (.1%), academic self-efficacy (29.0%), academic goal progress (62.7%), academic satisfaction (53.9%), and life satisfaction (45.9%). Figure 2 shows the summary of standardized path coefficients for the academic SCWB model.

Social SCWB model testing. The relations in the hypothesized social SCWB model (see Figure 1) were tested with the full sample. Upon review of the CFI and SRMR indices, the hypothesized social SCWB model was a good fit to the data. Similar

to the academic SCWB model, the RMSEA values were high due to the model only having two degrees of freedom therefore, CFI and SRMR indices were given more weight in the analysis. Eight paths were significant and illustrated relations in the expected directions and the following eleven paths were not significant: (a) positive affect on internalized racial oppression (Path 1), (b) positive affect on Native American identity (path 2), (c) internalized racial oppression on social self-efficacy (path 4), (d) Native American identity and internalized racial oppression on social goal progress (path 6, 7), (e) internalized racial oppression, Native American identity and social self-efficacy on social satisfaction (path 10, 11, 12), and (f) internalized racial oppression, Native American identity, and social satisfaction on life satisfaction (path 15, 16, 18). The relations within the model explained a significant amount of variance in internalized racial oppression (.6%), Native American identity (.1%), social self-efficacy (31.3%), social goal progress (34.2%), social satisfaction (52.3%), and life satisfaction (41.7%). Figure 2 shows the summary of standardized path coefficients for the social satisfaction model.

DISCUSSION

The present study sought to examine and establish the cross-cultural utility of the SCWB model with a sample of Native American college students, which has not previously been done. Furthermore, this study expands the current SCWB model by including new environmental supports and barriers (i.e., Native American identity and

internalized racial oppression). Lastly, this study examined both the academic and social satisfaction with these Native American college students versus focusing solely on their academic experiences. The findings of the current study found the academic SCWB model to be a very close fit to the data, whereas the social SCWB model was found to be a good fit to the data. Both models accounted for large portions of variance for domain satisfaction and life satisfaction. Similar to previous research (e.g., Lent et al., 2014; Lent et al., 2017; Lent et al., 2018; Ojeda et al., 2010), the current study's findings also demonstrate the cross-cultural utility of the SCWB model, with the addition of racial identity and internalized racial oppression. The relationships among the social cognitive predictors in both the academic and social models generally were in alignment with the SCWB theoretical expectations.

As predicted, positive affect was positively related to self-efficacy, domain satisfaction and life satisfaction in both the academic and social models. These findings suggest that those who feel more positive emotions have a greater belief in their academic and social abilities and experience higher levels of domain and life satisfaction. Research supports the importance of positive affect on academic self-efficacy, academic satisfaction, life satisfaction (Ojeda et al., 2011; Lent et al., 2018; Lent et al., 2017; Lent et al., 2014) and social satisfaction (Lent et al., 2005). Contrary to previous research findings for Mexican American college students (Ojeda et al., 2011) and Native American high school students (Kenyon & Carter, 2011), the path between positive affect and Native American identity were not significant. Further, positive affect was not

significantly related to internalized racial oppression. Schwarz and Strack (1999) suggested that judgements about affective experiences are assessed situationally as well as on information that is chronically accessible. Given that Native American identity and internalized racial oppression for Native American students are deeply rooted in historical systems of heritage and oppression and are not situationally grounded, the nonsignificant relationships of positive affect on racial identity and internalized racial oppression makes sense for the present study. Future research should replicate this study with other Native American college students to assess if the non-significant relation among positive affect and Native American identity and internalized racial oppression is consistent across studies and samples.

As hypothesized, there was a significant negative relationship between racial identity and internalized racial oppression for the Native American college students in this study. This finding is consistent with previous research done with samples consisting of persons from racially diverse communities where internalized racial oppression and ethnic/racial identification tend to be negatively correlated (e.g., David & Okazaki, 2006; Ferrera, 2017). This suggests that Native American students in this study who did not feel centered in their racial identity exhibited higher levels of internalized racial oppression [i.e., belief system nested in negative stereotypes that are intergenerationally passed down (Poupart, 2003)].

In the current study, Native American identity was found to have a significant positive relationship with life satisfaction in the academic model. Specifically, for the

academic model, students who identify their Native identity as being central to who they are, had higher ratings of life satisfaction. In a meta-analytic path analysis of the SCWB model, Sheu and colleagues (2020) found that individuals who endorsed interdependent/collectivistic cultural norms experienced greater overall well-being. Specific to academic models, interdependence has been found to have a significant positive relationship with life satisfaction in Singaporean college students (Sheu et al., 2014), Asian American students (Sheu et al., 2016) and Latino American students (Sheu et al., 2016). The current findings support this relationship given the similarities in interdependence/collectivism and Native American cultural values of interconnectedness.

In relation to the social model, Native American identity was positively related to social self-efficacy meaning those who were more centered in the racial identity felt they had a greater ability in navigating social situations. This supports previous research where Native American students who had a strong identification with their Native American identity and had an ability to function in the mainstream environment had greater social adjustment (Watson, 2009). This could be due to the comfort Native American students feel within themselves when they are connected to their own culture allowing them to more positively assess their ability to be socially efficacious. Given the limited research within the social domains of the SCWB model (Sheu et al., 2020) and with Native American students' social well-being in general, further investigation is warranted.

Additionally, results suggested nonsignificant effects of Native American identity on self-efficacy, goal progress, and domain satisfaction for the academic model. Similar to Ojeda et al. (2011), being oriented toward one's culture (enculturation) did not result in a significant relationship on college self-efficacy, goal progress or academic satisfaction. However, this is in contrast to research that has found for Native American students having higher Native American identification resulted in greater levels of academic adjustment (Watson, 2009) and having greater confidence in their academic abilities (Schiefer and Krahe, 2013). The divergence in the results of the current study and past research with Native American students may be due to the fact that many Native American students' reason for attending higher education is to potentially give back to their communities (Drywater-Whitekiller, 2010; Wexler & Burke, 2011). Therefore, the academic constructs in this model may not truly capture the academic experience and satisfaction of these students. Further, the measures used in the current study may need to be modified to more closely align with this cultural consideration. Lastly, future research should continue to examine the role of racial identity on Native American students' academic satisfaction.

For the social model, this study found non-significant relationships between racial identity and social goal progress, domain satisfaction, and life satisfaction. Given that there is no known research on the social model for SCWB that incorporates cultural variables, it is difficult to draw conclusions. Some research with Native American students, however, have suggested that institutional environmental factors (e.g., presence

of cultural centers) were significantly impactful on the social connectedness they felt at college (Flynn et al., 2012, Guillory & Wolverton, 2008). It may be the institutional factors that promote and support Native students' identity have more of an effect on the social constructs in this model rather than an individual's actual racial centrality. Future research should consider including other measures of supports that are at the institutional level.

Internalized racial oppression was negatively associated with one's belief in their ability to be successful in college. To our knowledge, there is no known research that assesses the relationship between internalized racial oppression and the academic or social experiences of Native American college students. However, the stereotype that Native Americans are uneducated is a common belief that is often internalized (Poupart, 2003) and therefore, could result in lower academic self-efficacy beliefs that we see in the current study.

Internalized racial oppression was not found to be associated with goal progress, domain satisfaction or life satisfaction in the academic or social model. This may be occurring because the internalized racial oppression measure may be too removed or disconnected from the variables in this study. It may be advantageous for future studies to create a scale that is more central to academic and social domains as it relates internalized racial oppression. Further, this model should be replicated with more Native American students to assess if these results are consistent across samples.

The current findings also suggest that a student's belief in their ability to perform successfully predicts positive progress toward academic goals and academic satisfaction. This finding has been supported by previous research that found self-efficacy to predict goal progress and academic satisfaction across multiple ethnicities and nationalities (Ezeofor & Lent, 2014; Lent et al., 2014; Lent et al., 2017; Ojeda et al., 2011; Sheu et al., 2016). The significant relationship between self-efficacy and academic satisfaction in the current study is in contrast with a study employed in two African countries (Lent et al., 2014) where there was not a significant relationship found. Lent and colleagues (2018), however, mentioned that it is not uncommon to see variability in the direct relationship between goal progress and self-efficacy and academic satisfaction. Further, they noted the reason for these differences is still unknown suggesting it could be due to cultural differences or methodological considerations. Similar to Lent and colleagues (2005), social self-efficacy produced a significant relationship with social goal progress, but there was not a significant relationship with social satisfaction.

Having positive feelings around progressing toward academic goals was predictive of life satisfaction but was not predictive of academic satisfaction. Previous studies have shown mixed results for both of these paths. For example, some studies have reported a significant positive relationship for academic goal progress on academic satisfaction and overall life satisfaction (Ojeda et al., 2011; Sheu et al., 2016), academic goal progress on academic satisfaction (Ezeofor & Lent, 2014; Lent et al., 2017; Sheu et al., 2016), and no significant relationships between either path (Lent et al., 2018). Given

the mixed results cross-culturally, it is not an anomaly that the current study only found academic goal progression for Native American students to be predictive of higher satisfaction with their overall well-being, it was however in contrast to our hypothesis. In contrast to the academic model, Native American students who felt they were reaching their social goals had higher satisfaction overall as well as higher social satisfaction. These results are in contrast to Lent et al. (2005) where there was only a significant relationship between social goal progress and social satisfaction in a predominantly White sample. The difference between the previous study and the current study could be due to the collectivistic culture Native students often come from and points to the importance for these students to feel that they are supported and part of a community which in turn leads them to feel more socially and globally satisfied.

Lastly, as expected and consistent with previous research (Lent et al., 2005; Lent et al., 2014; Lent et al., 2017; Lent et al., 2018 Ojeda et al., 2011) Native American students who felt academically satisfied also were overall satisfied in life, but in contrast to Lent et al. (2005), social satisfaction had no effect on overall satisfaction. Considering that a major motivator for Native American students to attend college is to obtain an education in an effort to later give back to their community (Drywater-Whitekiller, 2010; Wexler & Burke, 2011), having satisfaction in the academic area would predict overall life satisfaction because they feel they are carrying out this endeavor. Lent et al. (2005) posited that overall life satisfaction was indicative of domain specific satisfaction, therefore, given that many Native American students' main goal is to receive their

education, rather than to become socially connected, these results would make sense for this population.

Given the research suggesting that familial and institutional support and tribal support are instrumental in Native American students' college completion, this could also be true for their actual satisfaction at college. Because data was collected during the COVID-19 pandemic, some of these supports could have been compromised or enhanced and therefore, may have skewed the results of this study. Due to the restructuring that occurred during COVID-19 (e.g., on campus to online format) and the impact the pandemic had on overall well-being of individuals and students, this should also be taken into consideration in this study.

Data collection also occurred during a time where the racism pandemic gained global attention and demands for justice were made worldwide. One may think this would result in significant relationships between the racial related variables on Native American students' overall well-being and satisfaction, however, the absence of relations may say more. One explanation for the nonsignificant relations is the fact that for many Black Indigenous People of Color (BIPOC), these injustices are not new and were a part of their everyday experiences prior to the upheaval surrounding George Floyd's murder. Therefore, you probably would not see a significant shift in how Native American students view their racial identity or internalized oppression because it was already a part of their personal conceptualization. Another explanation for these non-significant relationships, is that the scales used were not specifically tailored to how racial identity

and internalized racial oppression have effects on their academic and social experiences. Native American students have a long history of trauma as it relates to western education and may require scales that specifically tap into these specific constructs.

Limitations & Future research

This study, as with others, was not without limitations. First, the sample size is relatively small; however, it is not unusual for studies focused solely on Native American students to have smaller sample sizes. Second, due to the variability across tribal communities and the importance of racial identification and effects of internalized racial oppression for each individual is also variable, generalizability should be done with caution. Third, although this study's measures appeared to be reliable and valid by traditional research standards, all measures in this study were novel to this sample. Thus, they may not truly capture the concepts being evaluated as they would relate Native American students. Fourth, because data collection occurred during the COVID-19 and racial pandemic, results should be done with caution as both experiences could have skewed the results. Lastly, this study employed path analytics and therefore, measurement error was not accounted for because there were no latent variables used like in SEM.

There are several directions for future research. As the first study to apply the SCWB model within a Native American population, more studies are needed to evaluate the applicability of this model with other Native American samples. Further, because this is only the second study, to our knowledge, to evaluate both academic and social of the

SCWB model, future research should begin to focus on the social domain. Instruments that more closely align with the cultural conceptualization of social, academic and overall well-being should be explored or created for Native American students. For example, the non-significant relationships found between internalized racial oppression and all variables in both models (with the exception of academic self-efficacy), suggests that a scale that specifically measures internalized racial oppression specific to academic and social experiences may be warranted. Given the amount of nonsignificant relationship in both of the models with racial identity and internalized racial oppression, other cultural indicators for environmental supports and barriers should be explored. For example, research suggests the importance of institutional support being a positive indicator of social well-being (Flynn et al., 2012 & Guillory & Wolverton, 2008) and could be included in future studies.

Implications

The present study alluded to the importance that racial centrality has on the experiences of Native American students. Therefore, effort at the institutional levels should be made to be more supportive of Native American students' identities. For example, programing that allows Native students to maintain and/or foster their cultural connections should be developed. Further, it is suggested that culturally congruent counseling and peer-mentoring programs should be made available to Native students while attending institutions of higher education (Guillory, 2009). Peer-mentoring and

cultural centers that allow students to connect with others and connect with their own identity can enhance the social self-efficacy of these students.

Internalized racial oppression was also shown to have negative effects on the academic self-efficacy on Native American students. David and colleagues (2019) note that because of the psychological distress and mental health concerns, social justice frameworks should be incorporated in psychological services. This approach should also be incorporated at institutional levels as well as within classrooms where Native American students are present in an effort to better identify when internalized racial oppression is a cause of distress (David et al., 2019) or interfering with academic self-efficacy. Further, when identified, this distress should be handled with sensitivity and with the acknowledgement of the systemic oppression that creates and perpetuates internalized racial oppression of these students inside and outside of the classrooms.

In conclusion, the current findings suggest that the SCWB model offers utility in understanding the academic and social satisfaction of Native American college students. In addition to identifying key social-cognitive pathways within this group, positive affectivity and cultural factors (racial identity and internalized racial oppression) were shown to be predictive factors for social self-efficacy and academic self-efficacy. Future research should focus on the replication of this study with other Native American students and the use of more appropriate measures if warranted.

REFERENCES

- Bandura, A. (1997). *Self-efficacy. The exercise of control*. New York: Freeman.
- Brown, D. L. & Segrist, D. (2016) African American career aspirations: Examining the relative influence of internalized racism. *Journal of Career Development*, 43, 177 – 189. doi: 10.1177/0894845315586256
- Brown, D. L., Rosnick, C. B., & Segrist, D. J. (2016). Internalized racial oppression and higher education values: The mediational role of academic locus of control among college African American men and women. *Journal of Black Psychology*, 43, 358 – 380. doi: 10.1177/009579841865
- Cajete, G. A. (1999). The American Indian learner and bicultural science education. In K. G. Swisher & J. W. Tippeconnic, III (Eds.). *Next steps: Research and practice to advance Indian education* (pp. 135-157). Charleston, WV. Clearinghouse on Rural Education and Small Schools. (ED427902)
- Chee, C. L., Shorty, G., & Kurpius, S. E. R. (2018). Academic stress of Native American undergraduates: The role of ethnic identity, cultural congruity, and self-beliefs. *Journal of Diversity in Higher Education*, September 1-9. doi: 10.1037/dhe0000094
- Cuellar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic Journal of Behavioral Sciences*, 17, 275-304. doi: 10.1177/07399863950173001

David, E. J. R. (2014). *Internalized oppression: The psychology of marginalized groups*.
Singer Publishing Company New York, NY.

David, E. J. R., & Okazaki, S. (2006). The Colonial Mentality Scale (CMS) for Filipino
Americans: Scale construction and psychological implications. *Journal of
Counseling Psychology*, 53, 241-252 doi 10.1037/0022-0167.53.2.241

David, E. J. R., Schroeder, T. M., & Fernandez, J. (2019). Internalized racism: A
systematic review of the psychological literature on racism's most insidious
consequences. *Journal of Social Issues*, 75, 1057-1086 doi: 10.1111/josi.12350

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With
Life Scale. *Journal of Personality Assessment*, 49, 71-75. doi:10.1207/
s15327752jpa4901_13

Diener, E., Lucas, R. E., & Oishi, S. (2002). Subjective well-being: The science of
happiness and life satisfaction. In C. R. Snyder & S. J. Lopez (Eds.). *Handbook of
positive psychology* (pp.63 – 73). New York Oxford University Press.

Duran, E. & Duran, B. (1995). *Native American Postcolonial Psychology*. State
University of New York Press.

Drywater-Whitekiller, V. (2010). Cultural resilience: Voices of Native American students
in college retention. *Canadian Journal of Native Studies*, 30, 1 – 19. Retrieved
from <http://www.brandonu.ca/library/CJNS/default.htm>

- Dvorakova, A. (2017). Contextual identity experiencing facilitates resilience in Native American academics. *The Social Science Journal*, 2017. doi: 10.1016/j.soscij.2017.12.001
- Espinosa, L. L., Turk, J. M., Taylor, M., & Chessman, H. M. (2019). *Race and ethnicity: A status report*. Washington, DC: American Council on Education.
- Ezeofor, I. & Lent, R. W. (2014). Social cognitive and self-construal predictors of well-being African college students in the U.S. *Journal of Vocational Behavior*, 85, 413-421. doi: 10.1016/j.jvb.2014.09.003
- Ferrera, M. J. (2017). The transformative impact of cultural portals on the ethnic identity development of second-generation Filipino-American emerging adults. *Journal of Ethnic & Cultural Diversity in Social Work: Innovation in Theory, Research & Practice*, 26, 236-253 doi: 10.1080/15313204.2016.1141739
- Flynn, S. V., Duncan, K., & Jorgensen, M. F. (2012). An emergent phenomenon of American Indian postsecondary transition and retention. *Journal of Counseling & Development*, 90, 437-449. doi: 10.1002/j.1556-6676.2012.00055.x
- Guardia, J. R., & Evans, N. J. (2008). Student development in tribal colleges and universities. *Journal of Student Affairs Research and Practice*, 45, 237-264. doi: 10.2202/1949-6605.1949
- Guillory, R. (2009). American Indian/ Alaska Native college student retention strategies. *Journal of Educational Development*, 33, 12-38.

- Huffman, T. (2001). Resistance theory and the transculturation hypothesis as explanations of college attrition and persistence among culturally traditional American Indian students. *Journal of American Indian Education, 40*, 1-23. <https://jaie.asu.edu/>
- Huffman, T (2003). A comparison of personal assessments of the college experience among reservation and non-reservation American Indian students. *Journal of American Indian Education, 42*, 1-23. <https://jaie.asu.edu/>
- Huffman, T., & Ferguson, R. (2007) Evaluation of the college experience among American Indian upperclassmen. *Great Plains Research: A journal of Natural and Social Science, 17*, 67-71. Retrieved from: www.digitalcommons.unl.edu/greatplainsresearch/880
- Hui, K., Lent, R. W., & Miller, M. J. (2013). Social cognitive and cultural orientation predictors of well-being in Asian American college students. *Journal of Career Assessment, 21*, 587-598. doi: 10.1177/1069072712475289
- Jackson, A., Smith, S., & Hill, C. (2003). Academic persistence among Native American college students. *Journal of College Student Development, 44*, 548-565. doi: 10.1353/csd.2003.0039
- Keith, J. F., Stastny, S. N., & Brunt, A. (2016). Barriers and strategies for success for American Indian college students: A review. *Journal of College Student Development, 57*, 698 – 714. doi: 10.1353/csd.2016.0069

- Kenyon, D. B. & Carter, J. S. (2011). Ethnic identity, sense of community, and psychological well-being among Northern Plains American Indian youth. *Journal of Community Psychology*, 39, 1-9. doi: 10.1002/jcop.20412
- LaFromboise, T., Coleman, H., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin*, 114, 395- 412
- Lee, H. & Flores, L. Y. (2017). Testing a social cognitive model of well-being with women engineers. *Journal of Career Assessment*, 1-16. doi: 10.1177/1069072717748668
- Lent, R. W. (2004) Toward a unifying theoretical and practical perspective on Well-being and psychosocial adjustment. *Journal of Counseling Psychology*, 51, 482-509. doi:10.1037/0022-0022-0167.51.4.482.
- Lent, R. W., & Brown, S.D. (2006). Integrating person and situation perspectives on work satisfaction: a social-cognitive view. *Journal of Vocational Behavior*, 69, 236 – 247. doi:10.1177/1069072707305769
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45, 79-122. doi: 10.1006/jvbe.1994.1027
- Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology*, 50, 458-465. doi: 10.1037/0022-0167.47.1.36

- Lent, R. W., Singley, D., Sheu, H., Gainor, K. A., Brenner, B. R., Treistman, D., & Ades, L. (2005). Social cognitive predictors of domain and life satisfaction: Exploring theoretical precursors of subjective well-being. *Journal of Counseling Psychology, 52*, 429-442. doi:10.1037/0022-0167.52.3.429
- Lent, R. W., Miller, M. J., Smith, P. E., Watford, B. A., Lim, R. H., Hui, K., Morrison, M. A., Wilkins, G., & Williams, K. (2013). Social cognitive predictors of adjustment to engineering majors across gender and race/ethnicity. *Journal of Vocational Behavior, 83*, 22-30. doi: 10.1016/j.jvb.2013.02.006
- Lent, R. W., Taveira, M., Cristiane, Sheu, H. Carneiro Pinto, J. (2018). Test of the social cognitive model of well-being in Portuguese and Brazilian college students. *Journal of Vocational Behavior, 109*, 78-86. doi: 10.1016/j.jvb.2018.09.009.
- Little Soldier, L. (1985). To soar with the eagles: Enculturation and acculturation of Indian children. *Childhood Education, 61*, 185-191. doi: 10.1080/00094056.1985.10520710
- Lopez, J. D. (2018). Factors influencing American Indian and Alaska Native postsecondary persistence: AI/AN millennium falcon persistence model. *Research in Higher Education, 59*, 792-811. doi: 10.1007/s11162-017-9487-6
- Miller, C. (2019). *College Graduation statistics*. Retrieved from educationdata.org/number-of-college-graduates#u-s-college-graduates

- Mosholder, R. S., Waite, B., Larson, C. A., & Goslin, C. (2016). Promoting Native American college recruitment & retention in higher education. *Multicultural Education, 23*, 27-36. Retrieved from: caddogap.com/periodicals.shtml
- Ojeda, L., Flores, L. Y., & Navarro, R. L. (2010). Social cognitive predictors of Mexican American college students' academic and life satisfaction. *Journal of Counseling Psychology, 58*, 61-71. doi: 10.1037/a0021687
- Okagi, L., Helling, M. K., & Bingham, G. E. (2009). American Indian college students' ethnic identity and beliefs about education. *Journal of College Student Development, 50*, 157-176. doi: 10.135/csd.o.0060
- Phinney, J. S. (1990). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7*, 156 – 176. doi: 10.1177/074355489272003
- Poupart, L. (2003). The familiar face of genocide: Internalized oppression among American Indians. *Hypatia, 18*, 87-100. doi: 10.1353/hyp.2003/0036
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology, 52*, 141 – 166. doi: 10.1146/annurev.psych.52.1.141
- Sellers, R. M., Rowley, S. A. J., Chavous, T. M., Shelton, J. N., & Smith, M. A. (1997). Multidimensional inventory of Black identity: A preliminary investigation of reliability and construct validity. *Journal of Personality and Social Psychology, 73*, 805-815. doi: 10.1037/0022-3514.73.4.805

- Schiefer, D. & B. Krahe (2013). Ethnic identity and orientation to White American culture are linked to well-being among American Indians – But in different ways. *Social Psychology, 45*, 1-14. doi: 10.10227/1846-9335/a000155
- Schwarz, N., & Strack, F. (1999). Reports of subjective well-being: Judgmental processes and their methodological implications. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp.61 – 84). New York: Russell Sage Foundation.
- Sheu, H-B., Chong, S. S., Chen, H-F., Lin, W-C. (2014). Well-Being of Taiwanese and Singaporean college students: Cross-Cultural validity of a modified social cognitive model. *Journal of Counseling Psychology, 61*, 447 – 460. doi: 10.1037/cou0000018
- Sheu, H-B., Mejia, A., Rigali-Oiler, M., Primé, D. R. (2016). Social cognitive predictors of academic and life satisfaction: Measurement and structural equivalence across three racial/ethnic groups. *Journal of Counseling Psychology, 63*, 460 -474 doi: 10.1037/cou00000158
- Sheu, H., Lent, R. W., Lui, A. M., Wang, X. T., Phrasavath, L., Cho, H., & Morris, T. R. (2020). Meta-analytic path analysis of the social cognitive well-being model: Applicability across life domain, gender, race/ethnicity, and nationality. *Journal of Counseling Psychology, 67*, 680 – 696. doi: 10.1037/cou0000431

- Thompson, M. N., Johnson-Jennings, M., & Nitzarim, R. S. (2013). Native American undergraduate students' persistence intentions: A psychosociocultural perspective. *Cultural Diversity and Ethnic Minority Psychology, 19*, 218-228. doi: 10.1037/a0031546
- U. S. Department of the Interior: Indian Affairs. (2015). *Frequently asked questions: Why tribes exist today in the United States*. Retrieved from <http://www.bia.gov/FAQs>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070. doi: 10.1037/0022-3514.54.6.1063
- Watson, J. C. (2009). Native American racial identity development and college adjustment at two-year institutions. *Journal of College Counseling, 12*, 125-136. doi: 10.1002/j.2161-1882.2009.tb00110.x
- Wexler, L., & Burke, T. K. (2011). Cultural identity, multicultural competence and resilience: A pilot study of Alaska Native students' experience at university. *Journal of American Indian Education, 50*, 44 – 64. Retrieved from <https://www.jaie.asu.edu>
- Willmott, K. E., Sands, T. L., Raucci, M., & Waterman, S. J. (2015). Native American college students: A group forgotten. *Journal of Critical Scholarship on Higher Education and Student Affairs, 2*, 80-104. Retrieved from: <https://ecommons.luc.edu/jcshesa>

Figure 1. The Unidirectional Academic and Social Model of Social Cognitive Well-Being for Native American College Students.

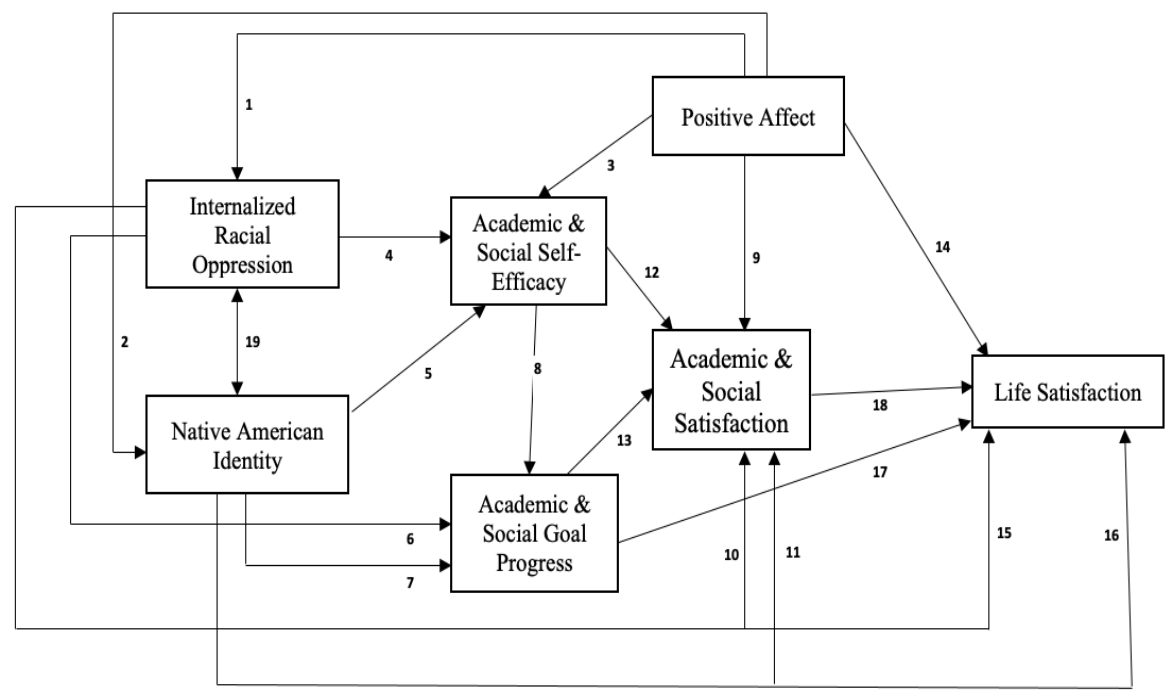


Figure 2. *The Unidirectional Social Cognitive Well-Being by Academic and Social Domains for Native American College Students.* Path coefficient (i.e., standardized regression weights) appear outside parentheses; individual path numbers appear inside parentheses. *Note:* A = Academic model; S = Social model; * = $p < .05$, ** = $p < .01$, *** = $p < .001$.

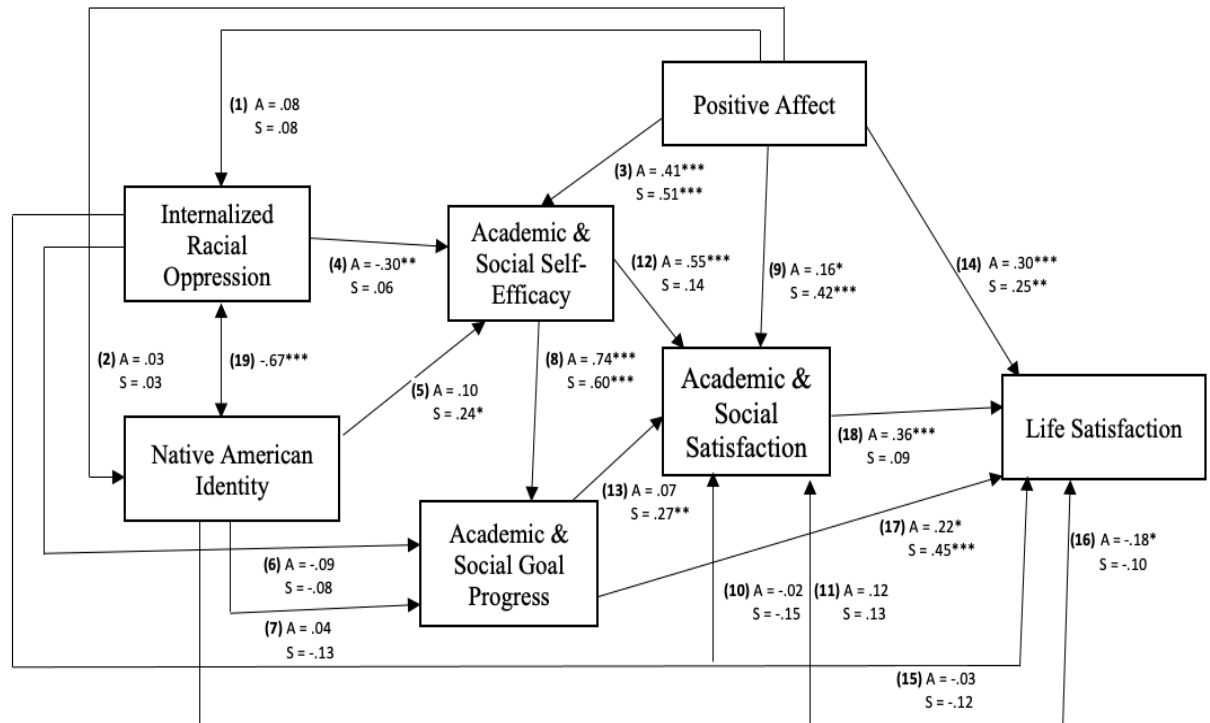


Table 1.
Means, Standard Deviations, Internal Consistency Estimates, and Correlations Among Variables of Interest

Variable	1	2	3	4	5	6	7	8	9	10
1. Positive Affect	-	-	-	-	-	-	-	-	-	-
2. Internalized Racial Oppression	.08	-	-	-	-	-	-	-	-	-
3. Native American Identity	.03	-.67**	-	-	-	-	-	-	-	-
4. Academic Self-Efficacy	.39**	-.33**	.31**	-	-	-	-	-	-	-
5. Social Self-Efficacy	.52**	-.06	.21*	.50**	-	-	-	-	-	-
6. Academic Goal Progress	.48**	-.36**	.33**	.78**	.42**	-	-	-	-	-
7. Social Goal Progress	.59**	-.03	.05	.50**	.58**	.52**	-	-	-	-
8. Academic Satisfaction	.41**	-.29**	.33**	.71**	.32**	.62**	.44**	-	-	-
9. Social Satisfaction	.63**	-.21*	.28**	.46**	.54**	.54**	.59**	.45**	-	-
10. Life Satisfaction	.54**	-.07	.04	.57**	.36**	.54**	.63**	.57**	.50**	-
α	.87	.97	.83	.92	.90	.88	.80	.84	.70	.81
<i>M</i>	34.11	92.95	37.70	32.79	73.12	26.14	24.65	27.33	21.84	25.35
<i>SD</i>	6.43	33.88	8.60	8.38	15.15	4.94	4.51	4.61	3.54	5.03

Note. **p* .05 level. ***p* .01 level.

Table 2.

Summary of Fit Statistics for both Academic and Social Models of Social Cognitive Well-Being

Model	χ^2	df	CFI	SRMR	RMSEA	90% CI
Academic Model of SCWB	20.051	2	.954	.040	.277	[.175, .392]
Social Model of SCWB	23.25	2	.937	.077	.300	[.198, .415]

Note. * = $p < .05$, ** = $p < .01$, *** = $p < .001$